

IN THE CLAIMS

Please amend Claims 1-11 to read as follows (a version of those claims, marked to show the changes, is appended):

1. (Amended) A diffractive optical element made of at least two materials of different dispersions, and including at least two diffraction gratings accumulated one upon another, wherein:
- each diffraction grating is formed on a curved surface of a substrate; and
- a diffraction grating, from among said at least two diffraction gratings, in which a curvature radius of the curved surface and a curvature radius of a grating surface in a portion where a grating pitch is largest, have different signs, is one of said at least two diffraction gratings which has a smallest grating thickness.
2. (Amended) A diffractive optical element according to Claim 1, wherein said diffraction grating having a smallest grating thickness is structured so that an angle which is defined between the grating surface and a grating edge of that diffraction grating is obtuse and is greater than an angle which is defined between the grating surface and a normal to the surface at a position where a plane connecting grating free ends of the smallest-thickness diffraction grating and the grating surface intersect with each other.
3. (Amended) A diffractive optical element according to Claim 1 or 2, wherein the grating edge of the diffraction grating is made parallel to an optical axis.

4. (Amended) A diffractive optical element according to Claim 1 or 2, wherein the curvature of the plane connecting the grating free ends is approximately even, in each diffraction grating of said at least two accumulated diffraction gratings.

5. (Amended) A diffractive optical element according to Claim 1 or 2, wherein at least one of said at least two diffraction gratings is formed at an interface of two different materials having different dispersions.

6. (Amended) A diffractive optical element according to Claim 1 or 2, wherein said at least two accumulated diffraction gratings are bonded with each other in a non-grating region.

7. (Amended) A diffractive optical element according to Claim 1 or 2, wherein said at least two diffraction gratings include at least one grating of a shape in which a direction of the grating thickness is different.

8. (Amended) A diffractive optical element according to Claim 1 or 2, wherein said diffractive optical element is effective to improve a diffraction efficiency of a predetermined order, over a whole visible light region of a used wavelength.